Map Unit Description (MN)

Lyon County, Minnesota

[Data apply to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

51--La Prairie loam

La Prairie, occasionally flooded

Extent: 95 percent of the unit
Landform(s): flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.20 to 1.56 in	6.6 to 8.4
A,AB,Bw -- 7 to 40 in	loam	moderate	5.62 to 7.28 in	6.6 to 8.4
C -- 40 to 60 in	stratified fine sandy loam to silty clay loam	moderate	2.95 to 4.33 in	6.6 to 8.4

86--Canisteo clay loam

Canisteo

Extent: 95 percent of the unit
Landform(s): flats
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A,ABg -- 0 to 22 in	loam	moderate	3.09 to 3.53 in	7.4 to 8.4
Bg -- 22 to 31 in	clay loam	moderate	1.63 to 1.99 in	7.4 to 8.4
Cg -- 31 to 60 in	clay loam	moderate	3.45 to 5.17 in	7.4 to 8.4

114--Glencoe silty clay loam

Glencoe

Extent: 95 percent of the unit
Landform(s): depressions
Slope gradient: 0 to 1 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .28
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	silty clay loam	moderately slow	1.77 to 2.17 in	6.1 to 7.3
A,AB -- 10 to 42 in	clay loam	moderately slow	5.81 to 7.10 in	6.1 to 7.3
Bg -- 42 to 47 in	loam	moderately slow	0.71 to 0.90 in	6.6 to 7.8
Cg -- 47 to 60 in	clay loam	moderate	1.95 to 2.47 in	6.6 to 7.8

127--Sverdrup sandy loam, 0 to 2 percent slopes

Sverdrup

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 32 in	sandy loam	moderately rapid	1.83 to 3.20 in	6.1 to 7.3
C -- 32 to 60 in	sand	rapid	0.56 to 1.68 in	7.4 to 8.4

127B--Sverdrup sandy loam, 2 to 6 percent slopes

Sverdrup

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 32 in	sandy loam	moderately rapid	1.83 to 3.20 in	6.1 to 7.3
C -- 32 to 60 in	sand	rapid	0.56 to 1.68 in	7.4 to 8.4

149B--Everly clay loam, 2 to 4 percent slopes

Everly

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 2 to 4 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	clay loam	moderately slow	1.67 to 1.87 in	6.1 to 7.3
Bw -- 10 to 26 in	clay loam	moderately slow	2.42 to 2.74 in	6.1 to 7.3
C -- 26 to 60 in	loam	moderately slow	5.76 to 6.43 in	7.4 to 8.4

149B2--Everly clay loam, 3 to 6 percent slopes, eroded

Everly, eroded

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 3 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	clay loam	moderately slow	1.67 to 1.87 in	6.1 to 7.3
Bw -- 10 to 26 in	clay loam	moderately slow	2.42 to 2.74 in	6.1 to 7.3
C -- 26 to 60 in	loam	moderately slow	5.76 to 6.43 in	7.4 to 8.4

149C2--Everly clay loam, 6 to 12 percent slopes, eroded

Everly, eroded

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	clay loam	moderately slow	1.67 to 1.87 in	6.1 to 7.3
Bw -- 10 to 26 in	clay loam	moderately slow	2.42 to 2.74 in	6.1 to 7.3
C -- 26 to 60 in	loam	moderately slow	5.76 to 6.43 in	7.4 to 8.4

184--Hamerly loam, 1 to 3 percent slopes

Hamerly

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AB -- 0 to 17 in	loam	moderate	3.39 to 4.06 in	7.4 to 8.4
Bk1 -- 17 to 26 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
Bk2,C -- 26 to 60 in	loam	moderate	4.74 to 6.43 in	7.4 to 8.4

210--Fulda silty clay

Fulda

Extent: 90 percent of the unit
Landform(s): flats
Slope gradient: 0 to 2 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 17 in	silty clay	slow	2.37 to 3.39 in	6.6 to 7.3
Bg -- 17 to 28 in	silty clay	slow	1.43 to 1.76 in	7.4 to 8.4
Cg -- 28 to 60 in	silty clay	slow	5.10 to 6.06 in	7.4 to 8.4

212--Sinai silty clay, 1 to 3 percent slopes

Sinai

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 1 to 3 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: C
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A,AB -- 0 to 17 in	silty clay	slow	2.20 to 2.71 in	6.1 to 7.3
Bw -- 17 to 33 in	silty clay	slow	2.74 to 3.07 in	6.6 to 7.8
Bk -- 33 to 47 in	silty clay	very slow	1.52 to 2.34 in	7.4 to 8.4
C -- 47 to 60 in	silty clay loam	very slow	1.43 to 2.21 in	7.4 to 8.4

219--Rolfe loam

Rolfe

Extent: 90 percent of the unit
Landform(s): depressions
Slope gradient: 0 to 1 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .37
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 20 in	loam	moderate	4.42 to 4.82 in	6.1 to 7.3
Btg -- 20 to 32 in	clay	slow	1.30 to 1.54 in	6.1 to 7.3
Cg -- 32 to 60 in	loam	moderate	3.91 to 4.47 in	6.1 to 8.4

241--Letri clay loam

Letri

Extent: 90 percent of the unit
Landform(s): swales
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A,AB -- 0 to 20 in	clay loam	moderately slow	3.61 to 4.42 in	6.1 to 7.3
Bg -- 20 to 35 in	clay loam	moderately slow	2.24 to 2.84 in	6.1 to 7.3
Cg -- 35 to 60 in	loam	moderately slow	4.22 to 4.71 in	6.6 to 8.4

246--Marysland loam

Marysland

Extent: 90 percent of the unit
Landform(s): flats
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A,Ak -- 0 to 18 in	loam	moderate	3.08 to 3.98 in	7.4 to 8.4
Bk -- 18 to 42 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4
2C -- 42 to 60 in	stratified gravelly coarse sand to fine sand	rapid	0.35 to 1.24 in	7.4 to 8.4

276--Oldham silty clay loam

Oldham

Extent: 90 percent of the unit
Landform(s): depressions
Slope gradient: 0 to 1 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Kw factor (surface layer) .37
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 13 in	silty clay loam	moderately slow	1.69 to 2.47 in	7.4 to 7.8
Bg -- 13 to 31 in	silty clay loam	moderately slow	2.54 to 3.62 in	7.4 to 8.4
Cg -- 31 to 60 in	silty clay loam	moderately slow	4.02 to 5.75 in	7.4 to 8.4

335--Urness silt loam

Urness

Extent: 90 percent of the unit
Landform(s): depressions
Slope gradient: 0 to 1 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.81 to 1.99 in	7.4 to 8.4
A -- 9 to 44 in	mucky silty clay loam	moderate	5.61 to 7.71 in	7.4 to 8.4
2Cg -- 44 to 60 in	silty clay loam	moderate	2.20 to 3.15 in	7.4 to 8.4

339--Fordville loam, 0 to 2 percent slopes

Fordville

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 12 in	loam	moderate	2.13 to 2.36 in	6.1 to 7.3
Bw -- 12 to 23 in	loam	moderate	1.98 to 2.31 in	6.1 to 7.3
Bk -- 23 to 28 in	loam	moderately rapid	0.61 to 0.92 in	6.1 to 8.4
2C -- 28 to 60 in	gravelly sand	rapid	0.96 to 1.91 in	7.4 to 8.4

339B--Fordville loam, 2 to 6 percent slopes

Fordville

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	loam	moderate	1.77 to 1.97 in	6.1 to 7.3
Bw -- 10 to 21 in	loam	moderate	1.98 to 2.31 in	6.1 to 7.3
Bk -- 21 to 26 in	loam	moderately rapid	0.61 to 0.92 in	6.1 to 8.4
2C -- 26 to 60 in	gravelly sand	rapid	1.02 to 2.03 in	7.4 to 8.4

341--Arvilla sandy loam, 0 to 2 percent slopes

Arvilla

Extent: 90 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw,BC -- 9 to 19 in	sandy loam	moderately rapid	1.08 to 1.38 in	6.6 to 7.3
2C -- 19 to 60 in	gravelly coarse sand	rapid	0.82 to 2.05 in	7.4 to 8.4

341B--Arvilla sandy loam, 2 to 6 percent slopes

Arvilla

Extent: 90 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw,BC -- 9 to 19 in	sandy loam	moderately rapid	1.08 to 1.38 in	6.6 to 7.3
2C -- 19 to 60 in	gravelly coarse sand	rapid	0.82 to 2.05 in	7.4 to 8.4

341C--Arvilla sandy loam, 6 to 12 percent slopes

Arvilla

Extent: 90 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 6 to 12 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw,BC -- 9 to 19 in	sandy loam	moderately rapid	1.08 to 1.38 in	6.6 to 7.3
2C -- 19 to 60 in	gravelly coarse sand	rapid	0.82 to 2.05 in	7.4 to 8.4

347--Malachy loam

Malachy

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A,AB -- 0 to 15 in	loam	moderate	2.99 to 3.29 in	7.4 to 8.4
Bk,C -- 15 to 36 in	fine sandy loam	moderately rapid	2.50 to 3.96 in	7.4 to 8.4
2C -- 36 to 60 in	sand	rapid	0.48 to 2.40 in	7.4 to 8.4

402E--Sioux soils, 2 to 40 percent slopes

Sioux

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 2 to 40 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .15
Land capability, nonirrigated 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 11 in	gravelly sandy loam	moderately rapid	1.10 to 1.65 in	7.4 to 8.4
C -- 11 to 16 in	gravelly sandy loam	moderately rapid	0.51 to 0.77 in	7.4 to 8.4
2C -- 16 to 60 in	very gravelly sand	rapid	1.31 to 2.62 in	7.4 to 8.4

421B--Ves loam, 1 to 4 percent slopes

Ves

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 1 to 4 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,AB -- 0 to 11 in	loam	moderate	1.87 to 2.43 in	6.1 to 7.3
Bw -- 11 to 21 in	loam	moderate	1.48 to 1.87 in	6.1 to 7.3
Bk -- 21 to 36 in	loam	moderate	2.24 to 2.84 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4

421B2--Ves loam, 3 to 6 percent slops, eroded

Ves, eroded

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 3 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,AB -- 0 to 11 in	loam	moderate	1.87 to 2.43 in	6.1 to 7.3
Bw -- 11 to 21 in	loam	moderate	1.48 to 1.87 in	6.6 to 7.3
Bk -- 21 to 36 in	loam	moderate	2.24 to 2.84 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4

423--Seaforth loam, 1 to 3 percent slopes

Seaforth

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,AB -- 0 to 15 in	loam	moderate	2.54 to 3.59 in	7.4 to 8.4
Bk -- 15 to 24 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
C -- 24 to 60 in	loam	moderate	6.09 to 6.81 in	7.4 to 8.4

437E--Buse loam, 18 to 25 percent slopes

Buse

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 18 to 25 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AB -- 0 to 14 in	loam	moderate	2.34 to 3.03 in	7.4 to 8.4
Bk -- 14 to 26 in	loam	moderate	1.71 to 2.32 in	7.4 to 8.4
C -- 26 to 60 in	loam	moderate	4.74 to 6.43 in	7.4 to 8.4

437F--Buse loam, 25 to 40 percent slopes

Buse

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 25 to 40 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 7e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AB -- 0 to 14 in	loam	moderate	2.34 to 3.03 in	7.4 to 8.4
Bk -- 14 to 26 in	loam	moderate	1.71 to 2.32 in	7.4 to 8.4
C -- 26 to 60 in	loam	moderate	4.74 to 6.43 in	7.4 to 8.4

446--Normania loam, 1 to 3 percent slopes

Normania

Extent: 90 percent of the unit
Landform(s): moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A,AB -- 0 to 17 in	loam	moderate	3.39 to 3.72 in	6.1 to 7.3
Bw -- 17 to 26 in	loam	moderate	1.36 to 1.72 in	6.6 to 7.3
Bkg -- 26 to 50 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4
Cg -- 50 to 60 in	loam	moderate	1.48 to 1.87 in	7.4 to 8.4

450--Rauville silty clay loam

Rauville, frequently flooded

Extent: 90 percent of the unit
Landform(s): flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 5w
Hydric soil: yes
Hydrologic group: D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 38 in	silty clay loam	moderate	7.18 to 8.31 in	7.4 to 8.4
Cg -- 38 to 60 in	silty clay loam	moderate	3.75 to 4.41 in	7.4 to 8.4

894D2--Storden-Everly complex, 12 to 18 percent slopes, eroded

Storden, eroded

Extent: 60 percent of the unit
Landform(s): moraines
Slope gradient: 12 to 18 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderately slow	1.42 to 1.56 in	7.4 to 8.4
Bk -- 7 to 23 in	loam	moderately slow	2.36 to 2.99 in	7.4 to 8.4
C -- 23 to 60 in	loam	moderately slow	5.55 to 7.03 in	7.4 to 8.4

Everly, eroded

Extent: 35 percent of the unit
Landform(s): moraines
Slope gradient: 12 to 15 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	clay loam	moderately slow	1.20 to 1.35 in	6.1 to 7.3
Bw -- 7 to 19 in	loam	moderately slow	1.77 to 2.01 in	6.1 to 7.3
C -- 19 to 60 in	loam	moderately slow	6.96 to 7.78 in	7.4 to 8.4

904B2--Arvilla-Barnes-Buse complex, 2 to 6 percent slopes, eroded

Arvilla

Extent: 40 percent of the unit
Landform(s): moraines
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 16 in	sandy loam	moderately rapid	0.78 to 0.99 in	6.6 to 7.3
2C -- 16 to 60 in	gravelly coarse sand	rapid	0.87 to 2.19 in	7.4 to 8.4

Barnes, eroded

Extent: 30 percent of the unit
Landform(s): moraines
Slope gradient: 2 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.28 to 1.70 in	6.1 to 7.3
Bw -- 7 to 14 in	sandy clay loam	moderate	1.00 to 1.27 in	6.1 to 7.3
Bk,C -- 14 to 60 in	loam	moderate	6.45 to 8.75 in	7.4 to 8.4

904B2--Arvilla-Barnes-Buse complex, 2 to 6 percent slopes, eroded

Buse, eroded

Extent: 20 percent of the unit
Landform(s): moraines
Slope gradient: 2 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AB -- 0 to 7 in	loam	moderate	1.20 to 1.56 in	7.4 to 8.4
Bk -- 7 to 26 in	loam	moderate	2.65 to 3.59 in	7.4 to 8.4
C -- 26 to 60 in	loam	moderate	4.74 to 6.43 in	7.4 to 8.4

953C--Arvilla-Storden-Ves complex, 6 to 15 percent slopes

Arvilla

Extent: 40 percent of the unit
Landform(s): moraines
Slope gradient: 6 to 15 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	6.1 to 7.3
Bw -- 8 to 16 in	sandy loam	moderately rapid	0.91 to 1.16 in	6.6 to 7.3
2C -- 16 to 60 in	gravelly coarse sand	rapid	0.87 to 2.19 in	7.4 to 8.4

Storden

Extent: 30 percent of the unit
Landform(s): moraines
Slope gradient: 6 to 15 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	7.4 to 8.4
Bk -- 7 to 23 in	loam	moderate	2.36 to 2.99 in	7.4 to 8.4
C -- 23 to 60 in	loam	moderate	5.55 to 7.03 in	7.4 to 8.4

953C--Arvilla-Storden-Ves complex, 6 to 15 percent slopes

Ves

Extent: 25 percent of the unit
Landform(s): moraines
Slope gradient: 6 to 15 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	6.1 to 7.3
Bw -- 8 to 18 in	loam	moderate	1.54 to 1.94 in	6.6 to 7.3
Bk -- 18 to 36 in	loam	moderate	2.66 to 3.37 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4

954C2--Storden-Ves loams, 5 to 12 percent slopes, eroded

Storden, eroded

Extent: 55 percent of the unit
Landform(s): moraines
Slope gradient: 5 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	7.4 to 8.4
Bk -- 7 to 23 in	loam	moderate	2.36 to 2.99 in	7.4 to 8.4
C -- 23 to 60 in	loam	moderate	5.55 to 7.03 in	7.4 to 8.4

Ves, eroded

Extent: 35 percent of the unit
Landform(s): moraines
Slope gradient: 5 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	6.1 to 7.3
Bw -- 8 to 18 in	loam	moderate	1.54 to 1.94 in	6.6 to 7.3
Bk -- 18 to 36 in	loam	moderate	2.66 to 3.37 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4

954D2--Storden-Ves loams, 12 to 18 percent slopes, eroded

Storden, eroded

Extent: 60 percent of the unit
Landform(s): moraines
Slope gradient: 12 to 18 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	7.4 to 8.4
Bk -- 7 to 23 in	loam	moderate	2.36 to 2.99 in	7.4 to 8.4
C -- 23 to 60 in	loam	moderate	5.55 to 7.03 in	7.4 to 8.4

Ves, eroded

Extent: 30 percent of the unit
Landform(s): moraines
Slope gradient: 12 to 18 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	6.1 to 7.3
Bw -- 8 to 18 in	loam	moderate	1.54 to 1.94 in	6.6 to 7.3
Bk -- 18 to 36 in	loam	moderate	2.66 to 3.37 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4

986--Lamoure and La Prairie soils, frequently flooded

Lamoure, frequently flooded

Extent: 45 percent of the unit
Landform(s): flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 6w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 25 in	silty clay loam	moderate	4.79 to 5.54 in	7.4 to 8.4
Bg -- 25 to 38 in	silty clay loam	moderate	2.14 to 2.52 in	7.4 to 8.4
Cg -- 38 to 60 in	silty clay loam	moderate	3.75 to 4.41 in	7.4 to 8.4

La Prairie, frequently flooded

Extent: 45 percent of the unit
Landform(s): flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 6w
Hydric soil: yes
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.20 to 1.56 in	6.6 to 8.4
A,AB,Bw -- 7 to 40 in	loam	moderate	5.62 to 7.28 in	6.6 to 8.4
C -- 40 to 60 in	stratified fine sandy loam to silty clay loam	moderate	2.95 to 4.33 in	6.6 to 8.4

1003B--Udorthents (cut and fill land), 0 to 6 percent slopes

Udorthents, (cut and fill land)

Extent: 100 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 6 percent
Parent material: variable loamy material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer)
Land capability, nonirrigated
Hydric soil:
Hydrologic group: B
Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

1007--Udorthents, shallow (sanitary landfill)

Udorthents, shallow, sanitary landfill

Extent: 100 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 20 percent
Parent material: variable soil material
Restrictive feature(s): greater than 60 inches
Flooding:
Ponding:
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer)
Land capability, nonirrigated
Hydric soil:
Hydrologic group: B
Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

1016--Udorthents

Udorthents

Extent: 100 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 6 percent
Parent material: variable soil material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer)
Land capability, nonirrigated
Hydric soil:
Hydrologic group: B
Potential for frost action:

Representative soil profile:

Texture	Permeability	Available water capacity	pH

1024A--Havelock clay loam, 0 to 2 percent slopes. occasionally flooded

Havelock, occasionally flooded

Extent: 75 to 85 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
Ap,A1,A2 --	0 to 32 in	clay loam	moderate	5.42 to 7.33 in	7.4 to 8.4
Cg --	32 to 60 in	clay loam	moderate	4.75 to 5.59 in	7.4 to 8.4

1029--Pits, gravel

Pits, gravel

Extent: 100 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient:
Parent material: sandy and gravelly outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class:

Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Kw factor (surface layer)
Land capability, nonirrigated
Hydric soil:
Hydrologic group:
Potential for frost action:

Representative soil profile:

Texture	Permeability	Available water capacity	pH

1032--Aquents and Udorthents

Aquents

Extent: 65 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 2 percent
Parent material: loamy or sandy material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer)
Land capability, nonirrigated 5w
Hydric soil:
Hydrologic group: B/D
Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

Udorthents

Extent: 30 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 15 percent
Parent material: loamy or sandy material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer)
Land capability, nonirrigated 4s
Hydric soil:
Hydrologic group: A
Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

1053--Aquolls and Aquents, ponded

Aquolls, ponded

Extent: 55 percent of the unit
Landform(s): depressions
Slope gradient: 0 to 1 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer)
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

Aquents, ponded

Extent: 35 percent of the unit
Landform(s): depressions
Slope gradient: 0 to 1 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer)
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

1356--Water, miscellaneous

Water, miscellaneous

Extent: 100 percent of the unit
Landform(s):
Slope gradient:
Parent material:
Restrictive feature(s): greater than 60 inches
Flooding:
Ponding:
Drainage class:

Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Kw factor (surface layer)
Land capability, nonirrigated
Hydric soil:
Hydrologic group:
Potential for frost action:

Representative soil profile:

Texture	Permeability	Available water capacity	pH

1809--Bearden complex

Bearden, occasionally flooded

Extent: 50 percent of the unit
Landform(s): -- error in exists on --
Slope gradient: 0 to 2 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .37
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 16 in	silty clay loam	moderate	2.74 to 3.71 in	7.4 to 8.4
Bk -- 16 to 37 in	silt loam	moderate	3.34 to 4.59 in	7.4 to 8.4
Cg -- 37 to 80 in	stratified silt loam to silty clay loam	moderate	6.87 to 9.44 in	7.4 to 8.4

Du Page, occasionally flooded

Extent: 40 percent of the unit
Landform(s): flats
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 36 in	loam	moderate	7.17 to 7.88 in	6.6 to 8.4
C1 -- 36 to 60 in	loam	moderate	4.08 to 4.56 in	7.4 to 8.4
C2 -- 60 to 64 in	stratified loam to sandy clay loam	moderately rapid	0.67 to 0.75 in	7.9 to 8.4

1810--Colvin complex

Colvin, occasionally flooded

Extent: 55 percent of the unit
Landform(s): flats
Slope gradient: 0 to 1 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	clay loam	moderately slow	1.67 to 2.26 in	7.4 to 8.4
Bg -- 10 to 30 in	silty clay loam	moderately slow	3.21 to 4.02 in	7.4 to 8.4
Cg -- 30 to 60 in	silty clay loam	moderately slow	4.49 to 5.98 in	7.4 to 8.4

Calco, occasionally flooded

Extent: 35 percent of the unit
Landform(s): flats
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A1 -- 0 to 16 in	silty clay loam	moderate	2.91 to 3.55 in	7.4 to 8.4
A -- 16 to 32 in	silty clay loam	moderate	2.83 to 3.46 in	7.4 to 8.4
Bg -- 32 to 60 in	silty clay loam	moderate	4.47 to 5.31 in	7.4 to 8.4

1814--Oldham silty clay

Oldham

Extent: 90 percent of the unit
Landform(s): depressions
Slope gradient: 0 to 1 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 17 in	silty clay	moderately slow	2.20 to 3.22 in	7.4 to 7.8
Bg -- 17 to 33 in	silty clay	moderately slow	2.26 to 3.23 in	7.4 to 8.4
Cg -- 33 to 60 in	clay loam	moderately slow	3.75 to 5.35 in	7.4 to 8.4

GP--Pits, gravel-Udipsamments complex

Pits, gravel

Extent: 50 to 100 percent of the unit
Landform(s): moraines, outwash plains, stream terraces
Slope gradient: 0 to 50 percent
Parent material: sandy and gravelly outwash
Restrictive feature(s): greater than 60 inches
Flooding:
Ponding:
Drainage class:

Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Kw factor (surface layer)
Land capability, nonirrigated
Hydric soil:
Hydrologic group:
Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

Udipsamments

Extent: 15 to 30 percent of the unit
Landform(s): moraines, outwash plains, stream terraces
Slope gradient: 0 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding:
Ponding:
Drainage class: excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer)
Land capability, nonirrigated
Hydric soil:
Hydrologic group: A
Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

J1A--Parnell silty clay loam, depressional, 0 to 1 percent slopes

Parnell, depressional

Extent: 85 to 95 percent of the unit
Landform(s): depressions on lake plains, depressions on moraines, depressions on till plains
Slope gradient: 0 to 1 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .37
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg -- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

J2A--La Prairie loam, 0 to 2 percent slopes, occasionally flooded

La Prairie, occasionally flooded

Extent: 80 to 95 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	loam	moderate	1.81 to 1.99 in	6.6 to 8.4
A -- 9 to 38 in	loam	moderate	5.83 to 6.41 in	6.6 to 8.4
Bw -- 38 to 50 in	loam	moderate	2.01 to 2.24 in	6.6 to 8.4
C -- 50 to 60 in	loam	moderate	1.67 to 1.87 in	7.4 to 8.4

J7A--Sverdrup sandy loam, 0 to 2 percent slopes

Sverdrup

Extent: 70 to 90 percent of the unit
Landform(s): flats on outwash plains
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 12 in	sandy loam	moderately rapid	1.54 to 1.77 in	6.1 to 7.3
Bw -- 12 to 26 in	sandy loam	moderately rapid	1.70 to 1.98 in	6.1 to 7.3
2C -- 26 to 80 in	sand	rapid	2.70 to 3.78 in	7.4 to 8.4

J7B--Sverdrup sandy loam, 2 to 6 percent slopes

Sverdrup

Extent: 80 to 90 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 12 in	sandy loam	moderately rapid	1.54 to 1.77 in	6.1 to 7.3
Bw -- 12 to 26 in	sandy loam	moderately rapid	1.70 to 1.98 in	6.1 to 7.3
2C -- 26 to 80 in	sand	rapid	2.70 to 3.78 in	7.4 to 8.4

J11A--Vallers clay loam, 0 to 2 percent slopes

Vallers

Extent: 75 to 95 percent of the unit
Landform(s): rims on depressions on till plains, flats on till plains, drainageways on till plains
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 14 in	clay loam	moderate	2.41 to 2.69 in	7.4 to 8.4
Bkg -- 14 to 38 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4
Cg -- 38 to 80 in	loam	moderately slow	6.26 to 7.93 in	7.4 to 8.4

J12A--Marysland loam, 0 to 2 percent slopes

Marysland

Extent: 75 to 95 percent of the unit
Landform(s): rims on depressions on outwash plains, flats on outwash plains, drainageways on outwash plains
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	loam	moderate	1.54 to 1.99 in	7.4 to 8.4
Ak -- 9 to 12 in	loam	moderate	0.47 to 0.61 in	7.4 to 8.4
Bkg -- 12 to 27 in	loam	moderate	2.30 to 2.92 in	7.4 to 8.4
2Cg -- 27 to 80 in	gravelly sand	rapid	1.06 to 3.69 in	7.4 to 8.4

J17A--Quam silty clay loam, depressional, 0 to 1 percent slopes

Quam, depressional

Extent: 85 to 95 percent of the unit
Landform(s): depressions on lake plains, depressions on moraines, depressions on till plains
Slope gradient: 0 to 1 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .28
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	silty clay loam	moderately slow	1.77 to 2.17 in	6.6 to 7.3
A1,A2 -- 10 to 45 in	silty clay loam	moderately slow	5.61 to 6.66 in	6.6 to 7.3
Cg -- 45 to 80 in	silty clay loam	moderately slow	5.61 to 6.66 in	6.6 to 7.8

J18A--Malachy sandy loam, 1 to 3 percent slopes

Malachy

Extent: 75 to 95 percent of the unit
Landform(s): knolls on outwash plains
Slope gradient: 1 to 3 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 17 in	sandy loam	moderately rapid	2.20 to 3.05 in	7.4 to 8.4
Bk -- 17 to 28 in	sandy loam	moderately rapid	1.32 to 2.09 in	7.4 to 8.4
2C -- 28 to 80 in	loamy sand	rapid	1.04 to 5.20 in	7.4 to 8.4

J23A--Lamoure silty clay loam, 0 to 2 percent slopes, occasionally flooded

Lamoure, occasionally flooded

Extent: 75 to 95 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 27 in	silty clay loam	moderate	4.89 to 5.98 in	7.4 to 8.4
Cg1 -- 27 to 34 in	silty clay loam	moderate	1.07 to 1.27 in	7.4 to 8.4
Cg2 -- 34 to 60 in	silt loam	moderate	5.20 to 5.72 in	7.4 to 8.4

J25A--Rauville silty clay loam, 0 to 1 percent slopes, frequently flooded

Rauville, frequently flooded

Extent: 80 to 95 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 1 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 6w
Hydric soil: yes
Hydrologic group: D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 27 in	silty clay loam	moderate	4.89 to 5.98 in	7.4 to 8.4
Cg -- 27 to 45 in	silty clay loam	moderate	2.83 to 3.37 in	7.4 to 8.4
2Cg -- 45 to 60 in	stratified gravelly sand to clay loam	moderately rapid	1.20 to 2.24 in	7.4 to 8.4

J26B--Darnen loam, 2 to 6 percent slopes

Darnen

Extent: 85 to 95 percent of the unit
Landform(s): hills on moraines
Slope gradient: 2 to 6 percent
Parent material: colluvium
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 24 in	loam	moderate	4.80 to 5.28 in	6.6 to 7.3
AB,Bw1 -- 24 to 34 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw2 -- 34 to 80 in	loam	moderate	7.83 to 8.75 in	6.6 to 8.4

J31B--Arvilla-Sandberg complex, 2 to 6 percent slopes

Arvilla

Extent: 35 to 55 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 14 in	sandy loam	moderately rapid	0.61 to 0.72 in	6.6 to 7.3
2Bk -- 14 to 48 in	gravelly sand	very rapid	0.68 to 1.69 in	7.4 to 8.4
2C -- 48 to 80 in	gravelly sand	very rapid	0.64 to 1.59 in	7.4 to 8.4

Sandberg

Extent: 30 to 50 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	gravelly sandy loam	very rapid	0.39 to 1.02 in	6.1 to 7.8
Bk -- 8 to 32 in	very gravelly sand	very rapid	0.48 to 1.44 in	7.4 to 8.4
C -- 32 to 80 in	gravelly sand	very rapid	0.96 to 2.88 in	7.4 to 8.4

J32A--Bigstone silty clay loam, depressional, 0 to 1 percent slopes

Bigstone, depressional

Extent: 70 to 90 percent of the unit
Landform(s): depressions on lake plains, depressions on moraines, depressions on till plains
Slope gradient: 0 to 1 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	silty clay loam	moderate	1.77 to 2.17 in	7.4 to 8.4
A -- 10 to 30 in	silty clay loam	moderate	3.61 to 4.42 in	7.4 to 8.4
Cg -- 30 to 80 in	loam	moderate	7.50 to 9.50 in	7.4 to 8.4

J42C--Sandberg-Arvilla complex, 6 to 12 percent slopes

Sandberg

Extent: 50 to 70 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 6 to 12 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .15
Land capability, nonirrigated 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	gravelly sandy loam	very rapid	0.49 to 1.28 in	6.1 to 7.8
Bk -- 10 to 22 in	gravelly sand	very rapid	0.24 to 0.73 in	7.4 to 8.4
C -- 22 to 80 in	gravelly sand	very rapid	1.16 to 3.47 in	7.4 to 8.4

Arvilla

Extent: 25 to 35 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 6 to 12 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 14 in	sandy loam	moderately rapid	0.61 to 0.72 in	6.6 to 7.3
2Bk -- 14 to 48 in	gravelly sand	very rapid	0.68 to 1.69 in	7.4 to 8.4
2C -- 48 to 80 in	gravelly sand	very rapid	0.64 to 1.59 in	7.4 to 8.4

J45F--Sandberg sandy loam, 12 to 40 percent slopes

Sandberg

Extent: 70 to 90 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 12 to 40 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 7e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 12 in	sandy loam	very rapid	1.54 to 1.77 in	6.1 to 7.8
Bk -- 12 to 28 in	gravelly sand	very rapid	0.32 to 0.97 in	7.4 to 8.4
C -- 28 to 80 in	gravelly sand	very rapid	1.04 to 3.12 in	7.4 to 8.4

J48A--Bigstone and Parnell soils, ponded, 0 to 1 percent slopes

Bigstone, ponded

Extent: 0 to 85 percent of the unit
Landform(s): depressions on moraines, depressions on lake plains, depressions on till plains
Slope gradient: 0 to 1 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .28
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1 -- 0 to 18 in	silty clay loam	moderate	3.26 to 3.98 in	7.4 to 8.4
A2 -- 18 to 48 in	silty clay loam	moderate	5.39 to 6.58 in	7.4 to 8.4
2Cg -- 48 to 80 in	loam	moderate	4.78 to 6.06 in	7.4 to 8.4

Parnell, ponded

Extent: 0 to 85 percent of the unit
Landform(s): depressions on moraines, depressions on lake plains, depressions on till plains
Slope gradient: 0 to 1 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .37
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg -- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

J57A--Balaton loam, 1 to 3 percent slopes

Balaton

Extent: 75 to 95 percent of the unit
Landform(s): knolls on till plains
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 13 in	loam	moderate	2.60 to 2.86 in	7.4 to 8.4
ABk,Bk -- 13 to 31 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 31 to 80 in	loam	moderate	7.32 to 9.28 in	7.4 to 8.4

J75A--Fordville loam, 0 to 2 percent slopes

Fordville

Extent: 80 to 90 percent of the unit
Landform(s): flats on outwash plains
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 6 in	loam	moderate	1.18 to 1.30 in	6.1 to 7.3
Bw -- 6 to 24 in	loam	moderate	3.08 to 3.44 in	6.1 to 7.3
2C -- 24 to 80 in	gravelly loamy sand	very rapid	2.24 to 3.35 in	7.4 to 8.4

J75B--Fordville loam, 2 to 6 percent slopes

Fordville

Extent: 80 to 90 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 6 in	loam	moderate	1.18 to 1.30 in	6.1 to 7.3
Bw -- 6 to 24 in	loam	moderate	3.08 to 3.44 in	6.1 to 7.3
2C -- 24 to 80 in	gravelly loamy sand	very rapid	2.24 to 3.35 in	7.4 to 8.4

J77A--Lamoure silty clay loam, 0 to 2 percent slopes, frequently flooded

Lamoure, frequently flooded

Extent: 75 to 95 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 5w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 27 in	silty clay loam	moderate	4.89 to 5.98 in	7.4 to 8.4
Cg1 -- 27 to 34 in	silty clay loam	moderate	1.07 to 1.27 in	7.4 to 8.4
Cg2 -- 34 to 60 in	silt loam	moderate	5.20 to 5.72 in	7.4 to 8.4

J80A--Lamoure-La Prairie complex, channeled, 0 to 2 percent slopes, frequently flooded

Lamoure, channeled, frequently flooded

Extent: 40 to 60 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 5w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 27 in	silty clay loam	moderate	4.89 to 5.98 in	7.4 to 8.4
Cg1 -- 27 to 34 in	silty clay loam	moderate	1.07 to 1.27 in	7.4 to 8.4
Cg2 -- 34 to 60 in	silt loam	moderate	5.20 to 5.72 in	7.4 to 8.4

La Prairie, channeled, frequently flooded

Extent: 30 to 50 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 5w
Hydric soil: yes
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	loam	moderate	1.81 to 1.99 in	6.6 to 8.4
A -- 9 to 38 in	loam	moderate	5.83 to 6.41 in	6.6 to 8.4
Bw -- 38 to 50 in	loam	moderate	2.01 to 2.24 in	6.6 to 8.4
C -- 50 to 60 in	loam	moderate	1.67 to 1.87 in	7.4 to 8.4

J95E--Buse, stony-Wilno complex, 18 to 25 percent slopes

Buse, stony

Extent: 65 to 85 percent of the unit
Landform(s): hills on moraines
Slope gradient: 18 to 25 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 37 in	loam	moderate	4.37 to 5.54 in	7.4 to 8.4
C -- 37 to 80 in	loam	moderately slow	6.44 to 8.15 in	7.4 to 8.4

Wilno

Extent: 10 to 20 percent of the unit
Landform(s): hills on moraines
Slope gradient: 18 to 25 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 42 in	loam	moderate	8.43 to 9.27 in	6.1 to 7.3
AB -- 42 to 52 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw1,Bw2 -- 52 to 80 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3

J95F--Buse, stony-Wilno complex, 25 to 40 percent slopes

Buse, stony

Extent: 65 to 85 percent of the unit
Landform(s): hills on moraines
Slope gradient: 25 to 40 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 7e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 37 in	loam	moderate	4.37 to 5.54 in	7.4 to 8.4
C -- 37 to 80 in	loam	moderately slow	6.44 to 8.15 in	7.4 to 8.4

Wilno

Extent: 10 to 20 percent of the unit
Landform(s): hills on moraines
Slope gradient: 25 to 40 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 7e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 42 in	loam	moderate	8.43 to 9.27 in	6.1 to 7.3
AB -- 42 to 52 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw1,Bw2 -- 52 to 80 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3

J96C2--Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded

Barnes, moderately eroded

Extent: 40 to 60 percent of the unit
Landform(s): hills on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	6.1 to 7.3
Bw1,Bw2 -- 7 to 19 in	loam	moderate	2.01 to 2.24 in	6.1 to 7.3
Bk -- 19 to 37 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 37 to 60 in	loam	moderately slow	3.43 to 4.34 in	7.4 to 8.4

Buse, moderately eroded

Extent: 20 to 40 percent of the unit
Landform(s): hills on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk1,Bk2 -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderately slow	2.95 to 3.74 in	7.4 to 8.4

J100D2--Buse, eroded-Wilno complex, 12 to 18 percent slopes

Buse, moderately eroded

Extent: 60 to 80 percent of the unit
Landform(s): hills on moraines
Slope gradient: 12 to 18 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk1,Bk2 -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderately slow	2.95 to 3.74 in	7.4 to 8.4

Wilno

Extent: 10 to 20 percent of the unit
Landform(s): hills on moraines
Slope gradient: 12 to 18 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 42 in	loam	moderate	8.43 to 9.27 in	6.1 to 7.3
AB -- 42 to 52 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw1,Bw2 -- 52 to 80 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3

J101B--Hokans-Svea complex, 1 to 4 percent slopes

Hokans

Extent: 60 to 80 percent of the unit
Landform(s): hills on moraines
Slope gradient: 1 to 4 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 15 in	loam	moderate	2.99 to 3.29 in	6.1 to 7.3
Bw -- 15 to 22 in	loam	moderate	1.20 to 1.35 in	6.1 to 7.3
Bk -- 22 to 40 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 40 to 80 in	loam	moderately slow	5.96 to 7.56 in	7.4 to 8.4

Svea

Extent: 15 to 25 percent of the unit
Landform(s): swales on moraines, flats on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
Bw -- 10 to 21 in	loam	moderate	1.87 to 2.09 in	6.6 to 7.3
Bk -- 21 to 36 in	clay loam	moderate	2.24 to 2.84 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderately slow	3.60 to 4.56 in	7.4 to 8.4

J104A--Svea loam, 1 to 3 percent slopes

Svea

Extent: 65 to 85 percent of the unit
Landform(s): swales on moraines, flats on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
Bw -- 10 to 21 in	loam	moderate	1.87 to 2.09 in	6.6 to 7.3
Bk -- 21 to 36 in	clay loam	moderate	2.24 to 2.84 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderately slow	3.60 to 4.56 in	7.4 to 8.4

J105A--Arvilla sandy loam, 0 to 2 percent slopes

Arvilla

Extent: 75 to 95 percent of the unit
Landform(s): flats on outwash plains
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 14 in	sandy loam	moderately rapid	0.61 to 0.72 in	6.6 to 7.3
2Bk -- 14 to 48 in	gravelly sand	very rapid	0.68 to 1.69 in	7.4 to 8.4
2C -- 48 to 80 in	gravelly sand	very rapid	0.64 to 1.59 in	7.4 to 8.4

J106B--Barnes-Buse-Svea complex, 1 to 6 percent slopes

Barnes, occasional saturation

Extent: 50 to 70 percent of the unit
Landform(s): hills on moraines, hills on till plains
Slope gradient: 3 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 11 in	loam	moderate	2.20 to 2.43 in	6.1 to 7.3
Bw -- 11 to 26 in	loam	moderate	2.54 to 2.84 in	6.1 to 7.3
Bk -- 26 to 44 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 44 to 80 in	loam	moderately slow	5.37 to 6.81 in	7.4 to 8.4

Buse

Extent: 10 to 20 percent of the unit
Landform(s): hills on moraines, hills on till plains
Slope gradient: 3 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk1,Bk2 -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderately slow	2.95 to 3.74 in	7.4 to 8.4

J106B--Barnes-Buse-Svea complex, 1 to 6 percent slopes

Svea

Extent: 10 to 20 percent of the unit
Landform(s): swales on moraines, flats on moraines, swales on till plains, flats on till plains
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
Bw -- 10 to 21 in	loam	moderate	1.87 to 2.09 in	6.6 to 7.3
Bk -- 21 to 36 in	clay loam	moderate	2.24 to 2.84 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderately slow	3.60 to 4.56 in	7.4 to 8.4

J107A--Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes

Lakepark

Extent: 30 to 40 percent of the unit
Landform(s): drainageways on moraines
Slope gradient: 0 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.1 to 7.3
A -- 8 to 27 in	loam	moderate	3.86 to 4.24 in	6.1 to 7.3
Bg -- 27 to 41 in	loam	moderate	2.34 to 2.62 in	6.6 to 7.3
Cg -- 41 to 80 in	loam	moderately slow	5.85 to 7.41 in	7.4 to 8.4

Roliss

Extent: 20 to 30 percent of the unit
Landform(s): drainageways on moraines, flats on moraines, rims on moraines
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
A -- 9 to 14 in	clay loam	moderate	0.87 to 0.97 in	7.4 to 8.4
Bg -- 14 to 20 in	clay loam	moderate	1.00 to 1.12 in	7.4 to 8.4
Cg -- 20 to 80 in	loam	moderately slow	8.98 to 11.37 in	7.4 to 8.4

J107A--Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes

Parnell, depressional

Extent: 10 to 20 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .37
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg -- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

J195B--Poinsett silty clay loam, 2 to 6 percent slopes

Poinsett, occasional saturation

Extent: 70 to 90 percent of the unit
Landform(s): hills on lake plains
Slope gradient: 2 to 6 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silty clay loam	moderate	1.42 to 1.73 in	6.1 to 7.3
Bw -- 8 to 23 in	silty clay loam	moderate	2.39 to 2.84 in	6.1 to 7.3
Bk -- 23 to 62 in	silty clay loam	moderate	6.24 to 7.41 in	7.4 to 8.4
2C -- 62 to 80 in	clay loam	moderately slow	2.54 to 3.26 in	7.4 to 8.4

J198C2--Rusklyn-Poinsett complex, 6 to 12 percent slopes, moderately eroded

Rusklyn, moderately eroded

Extent: 40 to 50 percent of the unit
Landform(s): hills on lake plains
Slope gradient: 6 to 12 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silty clay loam	moderate	1.63 to 1.99 in	7.4 to 8.4
Bk -- 9 to 28 in	silty clay loam	moderate	3.02 to 3.59 in	7.4 to 8.4
C1 -- 28 to 53 in	silty clay loam	moderate	4.03 to 4.79 in	7.4 to 8.4
2C2 -- 53 to 80 in	clay loam	moderately slow	3.75 to 4.82 in	7.4 to 8.4

Poinsett, moderately eroded

Extent: 35 to 45 percent of the unit
Landform(s): hills on lake plains
Slope gradient: 6 to 12 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silty clay loam	moderate	1.42 to 1.73 in	6.1 to 7.3
Bw -- 8 to 23 in	silty clay loam	moderate	2.39 to 2.84 in	6.1 to 7.3
Bk -- 23 to 62 in	silty clay loam	moderate	6.24 to 7.41 in	7.4 to 8.4
2C -- 62 to 80 in	clay loam	moderately slow	2.54 to 3.26 in	7.4 to 8.4

J199A--Fulda silty clay, 0 to 2 percent slopes

Fulda

Extent: 75 to 95 percent of the unit
Landform(s): flats on moraines, drainageways on moraines
Slope gradient: 0 to 2 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 13 in	silty clay	slow	1.69 to 2.21 in	6.1 to 7.3
Bg -- 13 to 33 in	silty clay	slow	2.01 to 3.81 in	6.6 to 7.3
Bkg -- 33 to 40 in	silty clay	slow	0.71 to 1.35 in	7.4 to 8.4
Cg -- 40 to 60 in	silty clay	slow	1.97 to 3.74 in	7.4 to 8.4

J227D2--Buse, moderately eroded-Sandberg complex, 12 to 18 percent slopes

Buse, moderately eroded

Extent: 40 to 60 percent of the unit
Landform(s): hills on moraines
Slope gradient: 12 to 18 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk1,Bk2 -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderately slow	2.95 to 3.74 in	7.4 to 8.4

Sandberg

Extent: 20 to 40 percent of the unit
Landform(s): hills on moraines
Slope gradient: 12 to 18 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 7e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 12 in	sandy loam	very rapid	1.54 to 1.77 in	6.1 to 7.8
Bk -- 12 to 28 in	gravelly sand	very rapid	0.32 to 0.97 in	7.4 to 8.4
C -- 28 to 80 in	gravelly sand	very rapid	1.04 to 3.12 in	7.4 to 8.4

J227F--Buse-Sandberg complex, 18 to 40 percent slopes

Buse

Extent: 40 to 60 percent of the unit
Landform(s): hills on moraines
Slope gradient: 18 to 40 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 7e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 37 in	loam	moderate	4.37 to 5.54 in	7.4 to 8.4
C -- 37 to 80 in	loam	moderately slow	6.44 to 8.15 in	7.4 to 8.4

Sandberg

Extent: 20 to 40 percent of the unit
Landform(s): hills on moraines
Slope gradient: 18 to 40 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 7e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 12 in	sandy loam	very rapid	1.54 to 1.77 in	6.1 to 7.8
Bk -- 12 to 28 in	gravelly sand	very rapid	0.32 to 0.97 in	7.4 to 8.4
C -- 28 to 80 in	gravelly sand	very rapid	1.04 to 3.12 in	7.4 to 8.4

J232B--Barnes-Buse-Arvilla complex, 2 to 6 percent slopes

Barnes, occasional saturation

Extent: 30 to 40 percent of the unit
Landform(s): hills on moraines, hills on till plains
Slope gradient: 2 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 11 in	loam	moderate	2.20 to 2.43 in	6.1 to 7.3
Bw -- 11 to 26 in	loam	moderate	2.54 to 2.84 in	6.1 to 7.3
Bk -- 26 to 44 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 44 to 80 in	loam	moderately slow	5.37 to 6.81 in	7.4 to 8.4

Buse

Extent: 25 to 35 percent of the unit
Landform(s): hills on moraines, hills on till plains
Slope gradient: 3 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk1,Bk2 -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderately slow	2.95 to 3.74 in	7.4 to 8.4

J232B--Barnes-Buse-Arvilla complex, 2 to 6 percent slopes

Arvilla

Extent: 20 to 30 percent of the unit
Landform(s): hills on moraines
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 14 in	sandy loam	moderately rapid	0.61 to 0.72 in	6.6 to 7.3
2Bk -- 14 to 48 in	gravelly sand	very rapid	0.68 to 1.69 in	7.4 to 8.4
2C -- 48 to 80 in	gravelly sand	very rapid	0.64 to 1.59 in	7.4 to 8.4

J235C2--Buse-Barnes-Arvilla complex, 6 to 12 percent slopes, moderately eroded

Buse, moderately eroded

Extent: 30 to 40 percent of the unit
Landform(s): hills on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk1,Bk2 -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderately slow	2.95 to 3.74 in	7.4 to 8.4

Barnes, moderately eroded

Extent: 25 to 35 percent of the unit
Landform(s): hills on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	6.1 to 7.3
Bw1,Bw2 -- 7 to 19 in	loam	moderate	2.01 to 2.24 in	6.1 to 7.3
Bk -- 19 to 37 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 37 to 60 in	loam	moderately slow	3.43 to 4.34 in	7.4 to 8.4

J235C2--Buse-Barnes-Arvilla complex, 6 to 12 percent slopes, moderately eroded

Arvilla

Extent: 20 to 30 percent of the unit
Landform(s): hills on moraines
Slope gradient: 6 to 12 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 14 in	sandy loam	moderately rapid	0.61 to 0.72 in	6.6 to 7.3
2Bk -- 14 to 48 in	gravelly sand	very rapid	0.68 to 1.69 in	7.4 to 8.4
2C -- 48 to 80 in	gravelly sand	very rapid	0.64 to 1.59 in	7.4 to 8.4

J236A--Highpoint Lake silty clay, 0 to 2 percent slopes

Highpoint Lake

Extent: 80 to 95 percent of the unit
Landform(s): flats on moraines
Slope gradient: 0 to 2 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: C
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 18 in	silty clay	slow	2.35 to 3.08 in	6.1 to 7.3
Bw -- 18 to 25 in	silty clay	slow	0.71 to 1.35 in	6.6 to 7.3
Bk -- 25 to 53 in	silty clay loam	slow	2.80 to 5.31 in	7.4 to 8.4
C -- 53 to 80 in	silty clay loam	slow	2.68 to 5.09 in	7.4 to 8.4

J237A--Brensall-Tress complex, 0 to 2 percent slopes

Brensall

Extent: 60 to 80 percent of the unit
Landform(s): flats on till plains
Slope gradient: 1 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	clay loam	moderately slow	1.34 to 1.50 in	6.1 to 7.3
Bt -- 8 to 15 in	clay loam	moderately slow	1.06 to 1.35 in	6.6 to 7.3
Bk -- 15 to 48 in	clay loam	moderately slow	4.63 to 5.29 in	7.4 to 8.4
BC -- 48 to 80 in	clay loam	moderately slow	4.46 to 5.10 in	7.4 to 8.4

Tress

Extent: 15 to 25 percent of the unit
Landform(s): swales on till plains
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 20 in	clay loam	moderately slow	3.41 to 3.81 in	6.1 to 7.3
Bt -- 20 to 36 in	clay loam	moderately slow	2.36 to 2.99 in	6.6 to 7.3
Bk -- 36 to 48 in	clay loam	moderately slow	1.71 to 1.95 in	7.4 to 8.4
BC -- 48 to 80 in	clay loam	moderately slow	4.46 to 5.10 in	7.4 to 8.4

J237B--Brensall-Tress complex 1 to 4 percent slopes

Brensall

Extent: 50 to 70 percent of the unit
Landform(s): flats on till plains
Slope gradient: 1 to 4 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	clay loam	moderately slow	1.34 to 1.50 in	6.1 to 7.3
Bt -- 8 to 15 in	clay loam	moderately slow	1.06 to 1.35 in	6.6 to 7.3
Bk -- 15 to 48 in	clay loam	moderately slow	4.63 to 5.29 in	7.4 to 8.4
BC -- 48 to 80 in	clay loam	moderately slow	4.46 to 5.10 in	7.4 to 8.4

Tress

Extent: 20 to 30 percent of the unit
Landform(s): swales on till plains
Slope gradient: 1 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 20 in	clay loam	moderately slow	3.41 to 3.81 in	6.1 to 7.3
Bt -- 20 to 36 in	clay loam	moderately slow	2.36 to 2.99 in	6.6 to 7.3
Bk -- 36 to 48 in	clay loam	moderately slow	1.71 to 1.95 in	7.4 to 8.4
BC -- 48 to 80 in	clay loam	moderately slow	4.46 to 5.10 in	7.4 to 8.4

J238D2--Buse, firm till-Wilno complex, 12 to 18 percent slopes

Buse, firm till, moderately eroded

Extent: 50 to 70 percent of the unit
Landform(s): hills on till plains
Slope gradient: 12 to 18 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	clay loam	moderately slow	1.54 to 1.72 in	7.4 to 8.4
Bk -- 9 to 34 in	clay loam	moderately slow	3.47 to 3.97 in	7.4 to 8.4
BC -- 34 to 80 in	clay loam	moderately slow	6.45 to 7.37 in	7.4 to 8.4

Wilno

Extent: 15 to 25 percent of the unit
Landform(s): hills on till plains
Slope gradient: 12 to 18 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 42 in	loam	moderate	8.43 to 9.27 in	6.1 to 7.3
AB -- 42 to 52 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw1,Bw2 -- 52 to 80 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3

J238E--Buse, firm till-Wilno complex, 18 to 25 percent slopes

Buse, firm till

Extent: 65 to 85 percent of the unit
Landform(s): hills on till plains
Slope gradient: 18 to 25 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	clay loam	moderately slow	1.54 to 1.72 in	7.4 to 8.4
Bk -- 9 to 34 in	clay loam	moderately slow	3.47 to 3.97 in	7.4 to 8.4
BC -- 34 to 80 in	clay loam	moderately slow	6.45 to 7.37 in	7.4 to 8.4

Wilno

Extent: 10 to 20 percent of the unit
Landform(s): hills on till plains
Slope gradient: 18 to 25 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 42 in	loam	moderate	8.43 to 9.27 in	6.1 to 7.3
AB -- 42 to 52 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw1,Bw2 -- 52 to 80 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3

J238F--Buse, firm till-Wilno complex, 25 to 40 percent slopes

Buse, firm till

Extent: 65 to 85 percent of the unit
Landform(s): hills on till plains
Slope gradient: 25 to 40 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 7e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	clay loam	moderately slow	1.54 to 1.72 in	7.4 to 8.4
Bk -- 9 to 34 in	clay loam	moderately slow	3.47 to 3.97 in	7.4 to 8.4
BC -- 34 to 80 in	clay loam	moderately slow	6.45 to 7.37 in	7.4 to 8.4

Wilno

Extent: 10 to 20 percent of the unit
Landform(s): hills on moraines
Slope gradient: 25 to 40 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 7e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 42 in	loam	moderate	8.43 to 9.27 in	6.1 to 7.3
AB -- 42 to 52 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw1,Bw2 -- 52 to 80 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3

J240B--Forman-Aastad complex, 3 to 6 percent slopes

Forman, occasional saturation

Extent: 40 to 60 percent of the unit
Landform(s): hills on till plains
Slope gradient: 3 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	clay loam	moderately slow	1.34 to 1.50 in	6.6 to 7.3
Bt1 -- 8 to 14 in	clay loam	moderately slow	0.94 to 1.20 in	6.6 to 7.3
Bt2 -- 14 to 17 in	clay loam	moderately slow	0.41 to 0.52 in	6.6 to 7.3
Bk -- 17 to 44 in	clay loam	moderately slow	3.80 to 4.35 in	7.4 to 8.4
Bky -- 44 to 60 in	clay loam	moderately slow	2.20 to 2.52 in	7.4 to 8.4

Aastad

Extent: 15 to 25 percent of the unit
Landform(s): swales on till plains
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A1,A2 -- 0 to 19 in	clay loam	moderately slow	3.21 to 3.59 in	6.1 to 7.3
Bw -- 19 to 32 in	clay loam	moderately slow	1.95 to 2.47 in	6.6 to 7.3
Bk -- 32 to 46 in	clay loam	moderately slow	1.98 to 2.27 in	7.4 to 8.4
BC -- 46 to 60 in	clay loam	moderately slow	1.93 to 2.20 in	7.4 to 8.4

J243A--Balaton clay loam, 1 to 3 percent slopes

Balaton

Extent: 85 to 95 percent of the unit
Landform(s): knolls on till plains
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	clay loam	moderately slow	1.67 to 1.87 in	7.4 to 8.4
Bk -- 10 to 28 in	clay loam	moderately slow	2.54 to 2.90 in	7.4 to 8.4
BC -- 28 to 60 in	clay loam	moderately slow	4.46 to 5.10 in	7.4 to 8.4

J250C2--Forman-Buse complex, 6 to 12 percent slopes, moderately eroded

Forman, moderately eroded

Extent: 40 to 50 percent of the unit
Landform(s): hills on till plains
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	clay loam	moderately slow	1.34 to 1.50 in	6.6 to 7.3
Bt1 -- 8 to 14 in	clay loam	moderately slow	0.94 to 1.20 in	6.6 to 7.3
Bt2 -- 14 to 17 in	clay loam	moderately slow	0.41 to 0.52 in	6.6 to 7.3
Bk -- 17 to 44 in	clay loam	moderately slow	3.80 to 4.35 in	7.4 to 8.4
Bky -- 44 to 60 in	clay loam	moderately slow	2.20 to 2.52 in	7.4 to 8.4

Buse, moderately eroded, firm till

Extent: 35 to 45 percent of the unit
Landform(s): hills on till plains
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	clay loam	moderately slow	1.54 to 1.72 in	7.4 to 8.4
Bk -- 9 to 34 in	clay loam	moderately slow	3.47 to 3.97 in	7.4 to 8.4
BC -- 34 to 80 in	clay loam	moderately slow	6.45 to 7.37 in	7.4 to 8.4

J251A--Parnell silty clay loam, firm till, 0 to 2 percent slopes

Parnell, firm till

Extent: 70 to 80 percent of the unit
Landform(s): drainageways on till plains
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .37
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 25 in	silty clay loam	moderately slow	4.54 to 5.54 in	6.1 to 7.3
Btg -- 25 to 44 in	silty clay	slow	2.46 to 3.02 in	6.1 to 7.3
Bkg -- 44 to 62 in	clay loam	moderately slow	2.48 to 2.83 in	7.4 to 8.4
BCg -- 62 to 80 in	clay loam	moderately slow	2.54 to 2.90 in	7.4 to 8.4

L84A--Glencoe clay loam, depressional, 0 to 1 percent slopes

Glencoe, depressional

Extent: 75 to 100 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 24 in	clay loam	moderate	4.32 to 5.28 in	6.1 to 7.8
ABg -- 24 to 35 in	clay loam	moderate	1.98 to 2.43 in	6.1 to 7.8
Bg -- 35 to 48 in	loam	moderate	1.95 to 2.47 in	6.6 to 7.8
Cg -- 48 to 60 in	loam	moderate	1.77 to 2.24 in	7.4 to 8.4

L96B--Estherville-Hawick complex, 2 to 6 percent slopes

Estherville

Extent: 40 to 65 percent of the unit
Landform(s): hills on outwash plains, hills on stream terraces
Slope gradient: 2 to 6 percent
Parent material: sandy outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 13 in	sandy loam	moderately rapid	1.69 to 2.34 in	5.6 to 7.3
Bw1 -- 13 to 18 in	sandy loam	moderately rapid	0.61 to 0.85 in	5.6 to 7.3
2Bw2 -- 18 to 23 in	loamy coarse sand	rapid	0.10 to 0.20 in	5.6 to 7.3
2C -- 23 to 60 in	gravelly coarse sand	rapid	0.74 to 1.48 in	6.6 to 8.4

Hawick

Extent: 25 to 40 percent of the unit
Landform(s): hills on outwash plains, hills on stream terraces
Slope gradient: 2 to 6 percent
Parent material: sandy outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.06 in	6.1 to 7.8
Bw -- 7 to 11 in	gravelly loamy coarse sand	rapid	0.12 to 0.39 in	6.1 to 7.8
C -- 11 to 80 in	gravelly coarse sand	very rapid	1.38 to 4.13 in	7.4 to 8.4

L139A--Wadena loam, 0 to 2 percent slopes

Wadena

Extent: 80 to 90 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains, flats on stream terraces, rises on stream terraces
Slope gradient: 0 to 2 percent
Parent material: loamy sediments over outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 13 in	loam	moderate	2.60 to 2.86 in	6.1 to 7.3
Bw1 -- 13 to 20 in	loam	moderate	0.99 to 1.35 in	5.6 to 7.3
Bw2 -- 20 to 30 in	sandy loam	moderately rapid	1.28 to 1.77 in	5.6 to 7.3
2C -- 30 to 60 in	gravelly coarse sand	rapid	0.60 to 1.20 in	6.6 to 8.4

L142A--Jeffers clay loam, 0 to 2 percent slopes

Jeffers

Extent: 80 to 95 percent of the unit
Landform(s): rims on depressions on moraines, flats on moraines
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 18 in	clay loam	moderate	3.08 to 3.44 in	7.4 to 8.4
Bg -- 18 to 22 in	clay loam	moderate	0.59 to 0.75 in	7.9 to 8.4
Bkg,Bk -- 22 to 35 in	clay loam	moderate	1.95 to 2.47 in	7.9 to 8.4
BC1,2 -- 35 to 60 in	clay loam	moderately slow	3.47 to 3.97 in	7.4 to 8.4

L172D2--Storden, firm till-Annton complex, 12 to 18 percent slopes, moderately eroded

Storden, moderately eroded, firm till

Extent: 40 to 60 percent of the unit
Landform(s): hills on moraines
Slope gradient: 12 to 18 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 20 in	loam	moderate	2.07 to 2.32 in	7.9 to 8.4
BC -- 20 to 80 in	clay loam	moderately slow	8.38 to 9.57 in	7.4 to 8.4

Annton, moderately, eroded

Extent: 20 to 45 percent of the unit
Landform(s): hills on moraines
Slope gradient: 12 to 18 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	clay loam	moderate	1.42 to 1.73 in	6.1 to 7.3
Bw -- 8 to 26 in	clay loam	moderate	3.08 to 3.44 in	6.1 to 7.3
Bk -- 26 to 60 in	loam	moderate	5.76 to 6.43 in	7.9 to 8.4
BC -- 60 to 80 in	clay loam	moderately slow	2.81 to 3.21 in	7.4 to 8.4

L173A--Moines clay loam, 1 to 3 percent slopes

Moines

Extent: 80 to 95 percent of the unit
Landform(s): flats on moraines, rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,ABy -- 0 to 14 in	clay loam	moderate	2.41 to 2.69 in	7.4 to 8.4
Byg1,2,Bk -- 14 to 40 in	loam	moderate	4.42 to 4.94 in	7.9 to 8.4
BCg -- 40 to 60 in	clay loam	moderately slow	2.76 to 3.15 in	7.4 to 8.4

L198A--North Twin-Walnut Grove complex, 0 to 2 percent slopes

North Twin

Extent: 60 to 80 percent of the unit
Landform(s): hills on moraines
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	clay loam	moderately slow	1.67 to 1.87 in	6.6 to 7.3
Bw -- 10 to 18 in	clay loam	moderately slow	1.16 to 1.49 in	6.1 to 7.3
Bk -- 18 to 31 in	clay loam	moderately slow	1.82 to 2.08 in	7.4 to 8.4
BCg,BC1,2 -- 31 to 80 in	clay loam	moderately slow	6.83 to 7.81 in	7.4 to 8.4

Walnut Grove

Extent: 15 to 25 percent of the unit
Landform(s): flats on moraines, rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 14 in	clay loam	moderately slow	2.41 to 2.69 in	6.6 to 7.3
Bw -- 14 to 28 in	clay loam	moderate	2.48 to 3.31 in	6.1 to 7.3
Bk -- 28 to 39 in	clay loam	moderately slow	1.54 to 1.76 in	7.4 to 8.4
BC1,2 -- 39 to 80 in	clay loam	moderately slow	5.73 to 6.55 in	7.4 to 8.4

L198B--North Twin-Walnut Grove complex, 1 to 4 percent slopes

North Twin

Extent: 50 to 70 percent of the unit
Landform(s): hills on moraines
Slope gradient: 1 to 4 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .24
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	clay loam	moderately slow	1.67 to 1.87 in	6.6 to 7.3
Bw -- 10 to 18 in	clay loam	moderately slow	1.16 to 1.49 in	6.1 to 7.3
Bk -- 18 to 31 in	clay loam	moderately slow	1.82 to 2.08 in	7.4 to 8.4
BCg,BC1,2 -- 31 to 80 in	clay loam	moderately slow	6.83 to 7.81 in	7.4 to 8.4

Walnut Grove

Extent: 15 to 35 percent of the unit
Landform(s): flats on moraines, rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 14 in	clay loam	moderately slow	2.41 to 2.69 in	6.6 to 7.3
Bw -- 14 to 28 in	clay loam	moderate	2.48 to 3.31 in	6.1 to 7.3
Bk -- 28 to 39 in	clay loam	moderately slow	1.54 to 1.76 in	7.4 to 8.4
BC1,2 -- 39 to 80 in	clay loam	moderately slow	5.73 to 6.55 in	7.4 to 8.4

L201A--Normania loam, 0 to 3 percent slopes

Normania

Extent: 75 to 90 percent of the unit
Landform(s): flats on moraines, rises on moraines
Slope gradient: 0 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A,AB -- 0 to 17 in	loam	moderate	3.39 to 3.72 in	6.1 to 7.3
Bw -- 17 to 26 in	loam	moderate	1.36 to 1.72 in	6.6 to 7.3
Bk -- 26 to 50 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4
Cg -- 50 to 60 in	loam	moderate	1.48 to 1.87 in	7.4 to 8.4

L202A--Pell Creek-Romnell complex, 0 to 2 percent slopes

Pell Creek

Extent: 35 to 70 percent of the unit
Landform(s): drainageways on moraines, flats on moraines, swales on moraines
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A,AB -- 0 to 20 in	clay loam	moderate	3.41 to 3.81 in	6.1 to 7.3
Bg -- 20 to 34 in	clay loam	moderate	2.07 to 2.62 in	7.4 to 8.4
BCg,BC1,2 -- 34 to 80 in	clay loam	moderately slow	6.45 to 7.37 in	7.4 to 8.4

Romnell

Extent: 15 to 45 percent of the unit
Landform(s): drainageways on moraines, swales on moraines
Slope gradient: 0 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 18 in	clay loam	moderate	3.08 to 4.35 in	6.6 to 7.8
Bg -- 18 to 27 in	clay loam	moderate	1.54 to 2.17 in	6.6 to 7.8
Btyg -- 27 to 33 in	clay loam	moderately slow	0.89 to 1.12 in	6.6 to 7.8
Bkg -- 33 to 43 in	clay loam	moderately slow	1.38 to 1.57 in	7.4 to 8.4
BCkg -- 43 to 60 in	clay loam	moderately slow	2.37 to 2.71 in	7.4 to 8.4

L207E--Belview, firm till-Ridgeton, firm till substratum complex, 18 to 25 percent slopes

Belview, firm till

Extent: 65 to 85 percent of the unit
Landform(s): escarpments on moraines
Slope gradient: 18 to 25 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 48 in	loam	moderate	6.02 to 7.63 in	7.4 to 8.4
BC1,2 -- 48 to 80 in	clay loam	moderately slow	4.46 to 5.10 in	7.4 to 8.4

Ridgeton, firm till substratum

Extent: 10 to 20 percent of the unit
Landform(s): escarpments on moraines
Slope gradient: 18 to 25 percent
Parent material: colluvium over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2,AB -- 0 to 31 in	loam	moderate	6.22 to 6.84 in	6.1 to 7.3
BA -- 31 to 49 in	loam	moderate	3.54 to 3.90 in	6.1 to 7.3
Bw -- 49 to 64 in	clay loam	moderate	2.46 to 2.76 in	6.1 to 7.3
BC -- 64 to 80 in	clay loam	moderately slow	2.20 to 2.52 in	7.4 to 8.4

L207F--Belview, firm till-Ridgeton, firm till substratum complex, 18 to 40 percent slopes

Belview, firm till

Extent: 65 to 85 percent of the unit
Landform(s): escarpments on moraines
Slope gradient: 18 to 40 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 48 in	loam	moderate	6.02 to 7.63 in	7.4 to 8.4
BC1,2 -- 48 to 80 in	clay loam	moderately slow	4.46 to 5.10 in	7.4 to 8.4

Ridgeton, firm till substratum

Extent: 10 to 20 percent of the unit
Landform(s): escarpments on moraines
Slope gradient: 18 to 35 percent
Parent material: colluvium over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2,AB -- 0 to 31 in	loam	moderate	6.22 to 6.84 in	6.1 to 7.3
BA -- 31 to 49 in	loam	moderate	3.54 to 3.90 in	6.1 to 7.3
Bw -- 49 to 64 in	clay loam	moderate	2.46 to 2.76 in	6.1 to 7.3
BC -- 64 to 80 in	clay loam	moderately slow	2.20 to 2.52 in	7.4 to 8.4

L214A--Calco-Du Page complex, 0 to 2 percent slopes, frequently flooded

Calco, frequently flooded

Extent: 40 to 70 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 5w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A1 -- 0 to 14 in	silty clay loam	moderate	2.98 to 3.26 in	7.4 to 8.4
A2 -- 14 to 40 in	silty clay loam	moderate	5.46 to 5.98 in	7.4 to 8.4
Cg -- 40 to 60 in	silty clay loam	moderate	3.54 to 3.94 in	7.4 to 8.4

Du Page, frequently flooded

Extent: 40 to 60 percent of the unit
Landform(s): flats on flood plains, rises on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 5w
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 36 in	loam	moderate	7.17 to 7.88 in	6.6 to 8.4
C1,C2 -- 36 to 60 in	loam	moderate	4.08 to 4.56 in	7.4 to 8.4

L220A--Calco silty clay loam, 0 to 2 percent slopes, occasionally flooded

Calco, occasionally flooded

Extent: 75 to 90 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A1 -- 0 to 14 in	silty clay loam	moderate	2.98 to 3.26 in	7.4 to 8.4
A2 -- 14 to 40 in	silty clay loam	moderate	5.46 to 5.98 in	7.4 to 8.4
Cg -- 40 to 60 in	silty clay loam	moderate	3.54 to 3.94 in	7.4 to 8.4

L221A--Du Page loam, 0 to 2 percent slopes, occasionally flooded

Du Page, occasionally flooded

Extent: 75 to 90 percent of the unit
Landform(s): flats on flood plains, rises on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A1,A2 -- 0 to 36 in	loam	moderate	7.17 to 7.88 in	6.6 to 8.4
C1,C2 -- 36 to 60 in	loam	moderate	4.08 to 4.56 in	7.4 to 8.4

L222C2--Ves-Storden-Pilot Grove complex, 6 to 12 percent slopes, moderately eroded

Ves, moderately eroded

Extent: 25 to 40 percent of the unit
Landform(s): moraines on hills
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.1 to 7.3
Bw -- 8 to 22 in	loam	moderate	2.13 to 2.69 in	6.6 to 7.3
Bk -- 22 to 33 in	loam	moderate	1.87 to 2.09 in	7.4 to 8.4
C -- 33 to 60 in	loam	moderate	4.55 to 5.09 in	7.4 to 8.4

Storden, moderately eroded

Extent: 20 to 40 percent of the unit
Landform(s): moraines on hills
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	7.4 to 8.4
Bk -- 7 to 55 in	loam	moderate	7.20 to 9.13 in	7.4 to 8.4
C -- 55 to 80 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4

L222C2--Ves-Storden-Pilot Grove complex, 6 to 12 percent slopes, moderately eroded

Pilot Grove

Extent: 15 to 35 percent of the unit
Landform(s): hills on moraines
Slope gradient: 6 to 12 percent
Parent material: outwash over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
Ap,A	0 to 9 in	sandy loam	moderately rapid	1.18 to 1.63 in	5.6 to 7.3
Bw	9 to 17 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
2BC	17 to 21 in	loamy sand	rapid	0.08 to 0.16 in	5.6 to 7.3
2C	21 to 58 in	gravelly coarse sand	rapid	0.74 to 1.48 in	6.6 to 8.4
3C	58 to 80 in	loam	moderate	3.31 to 4.19 in	7.4 to 8.4

L225B--Annton-North Twin complex, 3 to 6 percent slopes

Annton

Extent: 40 to 55 percent of the unit
Landform(s): hills on moraines
Slope gradient: 3 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	clay loam	moderate	1.77 to 2.17 in	6.1 to 7.3
Bw -- 10 to 22 in	clay loam	moderate	2.07 to 2.32 in	6.1 to 7.3
Bk -- 22 to 60 in	loam	moderately slow	5.29 to 6.05 in	7.4 to 8.4
BC -- 60 to 80 in	clay loam	moderately slow	2.81 to 3.21 in	7.4 to 8.4

North Twin

Extent: 15 to 45 percent of the unit
Landform(s): hills on moraines
Slope gradient: 1 to 4 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .24
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	clay loam	moderately slow	1.67 to 1.87 in	6.6 to 7.3
Bw -- 10 to 18 in	clay loam	moderately slow	1.16 to 1.49 in	6.1 to 7.3
Bk -- 18 to 31 in	clay loam	moderately slow	1.82 to 2.08 in	7.4 to 8.4
BCg,BC1,2 -- 31 to 80 in	clay loam	moderately slow	6.83 to 7.81 in	7.4 to 8.4

L226C2--Annton-Storden, firm till complex, 6 to 12 percent slopes, moderately eroded

Annton, moderately eroded

Extent: 30 to 60 percent of the unit
Landform(s): hills on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	clay loam	moderate	1.42 to 1.73 in	6.1 to 7.3
Bw -- 8 to 21 in	clay loam	moderate	2.21 to 2.47 in	6.1 to 7.3
Bk -- 21 to 34 in	clay loam	moderately slow	1.82 to 2.08 in	7.4 to 8.4
BC1,2 -- 34 to 80 in	clay loam	moderately slow	6.45 to 7.37 in	7.4 to 8.4

Storden, moderately eroded, firm till

Extent: 25 to 50 percent of the unit
Landform(s): hills on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	7.4 to 8.4
Bk -- 10 to 31 in	clay loam	moderately slow	2.98 to 3.40 in	7.4 to 8.4
BC -- 31 to 80 in	clay loam	moderately slow	6.83 to 7.81 in	7.4 to 8.4

L229A--Romnell silty clay loam, depressional, 0 to 1 percent slopes

Romnell, depressional

Extent: 75 to 95 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 23 in	silty clay loam	moderately slow	4.80 to 5.25 in	6.1 to 7.8
Bg1,2 -- 23 to 43 in	silty clay loam	moderate	3.41 to 4.82 in	6.6 to 7.8
BCg1 -- 43 to 51 in	clay loam	moderately slow	1.24 to 1.57 in	6.6 to 7.8
BCg2 -- 51 to 80 in	clay loam	moderately slow	4.02 to 4.60 in	7.4 to 8.4

L234A--Romnell silty clay loam, ponded, 0 to 1 percent slopes

Romnell, ponded

Extent: 75 to 95 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .28
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 42 in	silty clay loam	moderate	7.58 to 9.27 in	6.1 to 7.8
Bg -- 42 to 50 in	clay loam	moderate	1.18 to 1.50 in	6.6 to 7.8
BCg1 -- 50 to 51 in	clay loam	moderately slow	0.18 to 0.22 in	6.6 to 7.8
BCg2 -- 51 to 80 in	clay loam	moderately slow	4.02 to 4.60 in	7.4 to 8.4

L242B--Terril loam, firm till substratum, 2 to 6 percent slopes

Terril, firm till substratum

Extent: 80 to 95 percent of the unit
Landform(s): hills on moraines
Slope gradient: 2 to 6 percent
Parent material: colluvium over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A1,A2 -- 0 to 30 in	loam	moderate	5.98 to 6.58 in	6.1 to 7.3
A3,AB -- 30 to 40 in	loam	moderate	1.74 to 1.94 in	6.1 to 7.3
Bw -- 40 to 61 in	loam	moderate	3.34 to 3.76 in	6.1 to 7.3
BC -- 61 to 80 in	clay loam	moderately slow	2.65 to 3.02 in	7.4 to 8.4

L243A--Havelock-Zumbro complex, 0 to 3 percent slopes, frequently flooded

Havelock, frequently flooded

Extent: 50 to 85 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 5w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2 -- 0 to 32 in	loam	moderate	5.42 to 7.33 in	7.4 to 8.4
Cg -- 32 to 60 in	clay loam	moderate	4.75 to 5.59 in	7.4 to 8.4

Zumbro, frequently flooded

Extent: 10 to 20 percent of the unit
Landform(s): flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3s
Hydric soil: yes
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 10 in	fine sandy loam	moderately rapid	1.57 to 1.77 in	6.1 to 7.8
AB -- 10 to 42 in	loamy fine sand	rapid	2.58 to 3.23 in	6.1 to 7.8
C -- 42 to 60 in	fine sand	rapid	0.35 to 1.24 in	7.4 to 7.8

L246B--Dickman sandy loam, firm till substratum, 1 to 6 percent slopes

Dickman, firm till substratum

Extent: 75 to 95 percent of the unit
Landform(s): outwash plains on hills
Slope gradient: 1 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 12 in	sandy loam	moderately rapid	1.54 to 1.77 in	6.1 to 6.5
Bw -- 12 to 19 in	sandy loam	moderately rapid	0.85 to 0.99 in	6.1 to 7.3
2Bw,C -- 19 to 60 in	coarse sand	rapid	2.05 to 2.87 in	6.1 to 7.8
3C -- 60 to 80 in	clay loam	moderately slow	2.81 to 3.21 in	7.4 to 8.4

L248B--Annton-Swanlake, firm till complex, 3 to 6 percent slopes

Annton

Extent: 35 to 65 percent of the unit
Landform(s): hills on moraines
Slope gradient: 3 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 7
Wind erodibility index (WEI): 38
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	clay loam	moderate	1.77 to 2.17 in	6.1 to 7.3
Bw -- 10 to 22 in	clay loam	moderate	2.07 to 2.32 in	6.1 to 7.3
Bk -- 22 to 60 in	loam	moderately slow	5.29 to 6.05 in	7.4 to 8.4
BC -- 60 to 80 in	clay loam	moderately slow	2.81 to 3.21 in	7.4 to 8.4

Swanlake, firm till

Extent: 30 to 50 percent of the unit
Landform(s): hills on moraines
Slope gradient: 3 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	clay loam	moderately slow	1.34 to 1.50 in	7.4 to 8.4
ABK -- 8 to 18 in	clay loam	moderately slow	1.43 to 1.64 in	7.4 to 8.4
BK -- 18 to 40 in	clay loam	moderately slow	3.09 to 3.53 in	7.4 to 8.4
BC -- 40 to 80 in	clay loam	moderately slow	5.57 to 6.36 in	7.4 to 8.4

L249A--Knoke silty clay loam, firm till substratum, depressional, 0 to 1 percent slopes

Knoke, firm till substratum, depressional

Extent: 75 to 90 percent of the unit
Landform(s): depressions on lake plains, depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: lacustrine sediments
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
Ap,A1,A2	0 to 10 in	mucky silty clay loam	moderately slow	2.07 to 2.26 in	7.4 to 8.4
ABg	10 to 42 in	silty clay loam	moderately slow	6.78 to 7.43 in	7.4 to 8.4
Bg	42 to 63 in	silty clay loam	moderately slow	3.76 to 4.17 in	7.4 to 8.4
BCg	63 to 80 in	clay loam	moderately slow	2.37 to 2.71 in	7.4 to 8.4

L250A--Lowlein loam, firm till, 1 to 3 percent slopes

Lowlein, firm till

Extent: 80 to 90 percent of the unit
Landform(s): flats on moraines, rises on moraines, flats on stream terraces, rises on stream terraces
Slope gradient: 1 to 3 percent
Parent material: outwash over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,AB -- 0 to 14 in	loam	moderately rapid	1.84 to 2.13 in	6.1 to 7.3
Bw1 -- 14 to 24 in	sandy loam	moderately rapid	1.18 to 1.38 in	6.1 to 7.3
2Bw2 -- 24 to 31 in	loamy sand	rapid	0.43 to 0.78 in	6.1 to 7.3
3BC -- 31 to 80 in	clay loam	moderately slow	6.83 to 7.81 in	7.4 to 8.4

L251A--Blue Earth mucky silt loam, firm till substratum, depressional, 0 to 1 percent slopes

Blue Earth, depressional

Extent: 85 to 95 percent of the unit
Landform(s): depressions on lake plains, depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: coprogenic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	silty clay loam	moderate	1.77 to 2.36 in	7.4 to 8.4
Cg -- 10 to 68 in	silty clay loam	moderate	10.42 to 13.89 in	7.4 to 8.4
BCg -- 68 to 80 in	clay loam	moderately slow	1.71 to 1.95 in	7.4 to 8.4

M-W--Water, miscellaneous

Water, miscellaneous

Extent: 100 percent of the unit
Landform(s):
Slope gradient:
Parent material:
Restrictive feature(s): greater than 60 inches
Flooding:
Ponding:
Drainage class:

Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Kw factor (surface layer)
Land capability, nonirrigated
Hydric soil:
Hydrologic group:
Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

Map Unit Description (MN)

Lyon County, Minnesota

W--Water

Water

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture	*Permeability*	*Available water capacity*	*pH*

This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.